This listing of claims will replace all prior
versions, and listings, of claims in the application:

Claim 1 (canceled)

1   Claim 2 (original): A method for controlling sampling of
2   addressed data, the method comprising:
3   a) determining a state of next hop information
4   defining a destination for samples of addressed data;
5   b) if it is determined that the state of the next hop
6   information is stable, then
7   i) generating samples from the addressed data,
8   and
9   ii) forwarding the samples based on the next hop
10   information; and
11   c) if it is determined that the state of the next hop
12   information is not stable, then not forwarding
13   samples,
14   ~~The method of claim 1~~ wherein the act of not forwarding
15   samples includes dropping samples generated.

Claims 3 and 4 (canceled)

1   Claim 5 (currently amended): A method for controlling
2   sampling of addressed data, the method comprising:
3   a) determining a state of next hop information
4   defining a destination for samples of addressed data;
5   b) if it is determined that the state of the next hop
6   information is stable, then
7   i) generating samples from the addressed data,
8   and

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9   ii) forwarding the samples based on the next hop

10   information; and

11   c) if it is determined that the state of the next hop

12   information is not stable, then not forwarding

13   samples.

14 ~~The method of claim 1~~ wherein the next hop information (A)

15 includes an index or name associated with an interface, (B)

16 is associated with an interface, or (C) is associated with

17 a next hop destination address.

1 Claim 6 (original): The method of claim 5 wherein a link

2 terminated by the interface defines a point-to-point

3 connection with a sample destination device.

Claim 7 (canceled)

1 Claim 8 (currently amended): The method of claim 5 ~~7~~

2 wherein a link terminated by the interface defines a

3 point-to-point connection with a sample destination device.

Claim 9 (canceled)

1 Claim 10 (currently amended): A method for controlling

2 sampling of addressed data, the method comprising:

3   a) determining a state of next hop information

4   defining a destination for samples of addressed data;

5   b) if it is determined that the state of the next hop

6   information is stable, then

7   i) generating samples from the addressed data,

8   and

9   ii) forwarding the samples based on the next hop

10   information; and

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11   c) if it is determined that the state of the next hop
12   information is not stable, then not forwarding
13   samples,
14   The method of claim 1 wherein the act of determining a
15   state of next hop information defining a destination for
16   samples of addressed data includes reading a state flag.

1   Claim 11 (original): The method of claim 10 wherein the
2   state flag is stored in a hardware register.

1   Claim 12 (currently amended): A method for controlling
2   sampling of addressed data, the method comprising:
3   a) determining a state of next hop information
4   defining a destination for samples of addressed data;
5   b) if it is determined that the state of the next hop
6   information is stable, then
7   i) generating samples from the addressed data,
8   and
9   ii) forwarding the samples based on the next hop
10   information; and
11   c) if it is determined that the state of the next hop
12   information is not stable, then not forwarding
13   samples,
14   The method of claim 1 wherein the act of generating samples
15   from the addressed data is performed based on parameters.

1   Claim 13 (original): The method of claim 12 wherein the
2   parameters are user configured.

1   Claim 14 (original): The method of claim 13 wherein the
2   parameters include at least two parameters selected from a
3   group of parameters consisting of (a) sampling rate, (b)

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4   class to be sampled, (c) protocol to be sampled, and (d)
5   run length.

1   Claim 15 (currently amended): A method for controlling
2   sampling of addressed data, the method comprising:
3   a) determining a state of next hop information
4   defining a destination for samples of addressed data;
5   b) if it is determined that the state of the next hop
6   information is stable, then
7   i) generating samples from the addressed data,
8   and
9   ii) forwarding the samples based on the next hop
10   information;
11   c) if it is determined that the state of the next hop
12   information is not stable, then not forwarding
13   samples; and
14   The method of claim 1 further comprising:
15   d) counting some parameter of samples forwarded.

     Claims 16-19 (canceled)

1   Claim 20 (currently amended): A method for maintaining
2   information used to control sampling of addressed data, the
3   method comprising:
4   a) determining a state of next hop information
5   defining a destination for samples of addressed data;
6   and
7   b) if it is determined that the state of the next hop
8   information is unstable, then ensuring that
9   information used to control the sampling of addressed
10   data indicates that the next hop information is
11   unstable,

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12   wherein the information used to control the

13   sampling of addressed data includes next hop information

14   and next hop state information, and

15   ~~The method of claim 19~~ wherein the next hop information

16   includes an index or name associated with an interface.

1   Claim 21 (original):   The method of claim 20 wherein a link

2   terminated by the interface defines a point-to-point

3   connection with a sample destination device.

1   Claim 22 (currently amended):   A method for maintaining

2   information used to control sampling of addressed data, the

3   method comprising:

4   a)   determining a state of next hop information

5   defining a destination for samples of addressed data;

6   and

7   b). if it is determined that the state of the next hop

8   information is unstable, then ensuring that

9   information used to control the sampling of addressed

10   data indicates that the next hop information is

11   unstable,

12   wherein the information used to control the

13   sampling of addressed data includes next hop information

14   and next hop state information, and

15   ~~The method of claim 19~~ wherein the next hop information (A)

16   is associated with an interface, or (B) includes a next hop

17   destination address.

1   Claim 23 (original):   The method of claim 22 wherein a link

2   terminated by the interface defines a point-to-point

3   connection with a sample destination device.

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Claims 24-26 (canceled)

1   Claim 27 (currently amended): A method for maintaining
2   information used to control sampling of addressed data, the
3   method comprising:
4   a) accepting configured next hop information;
5   b) determining next hop interface information from
6   the accepted configured next hop information;
7   c) determining a state of the next hop interface
8   information; and
9   d) storing the determined next hop interface
10   information and the state of the next hop interface
11   information,
12   ~~The method of claim 26~~ wherein the next hop interface
13   information is an index or name associated with an
14   interface or a logical interface of a router.

Claim 28 (canceled)

1   Claim 29 (currently amended): A method for maintaining
2   information used to control sampling of addressed data, the
3   method comprising:
4   a) accepting configured next hop information;
5   b) determining next hop interface information from
6   the accepted configured next hop information;
7   c) determining a state of the next hop interface
8   information; and
9   d) storing the determined next hop interface
10   information and the state of the next hop interface
11   information,
12   ~~The method of claim 26~~ wherein the act of determining next
13   hop interface information from the accepted configured next

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14   hop information uses information in an interface list of a

15   router.

1   Claim 30 (currently amended):   A method for maintaining

2   information used to control sampling of addressed data, the

3   method comprising:

4   a)   accepting configured next hop information;

5   b)   determining next hop interface information from

6   the accepted configured next hop information;

7   c)   determining a state of the next hop interface

8   information; and

9   d)   storing the determined next hop interface

10   information and the state of the next hop interface

11   information,

12   The method of claim 26 wherein the act of determining a

13   state of the next hop interface information uses

14   information in a forwarding table of a router.

1   Claim 31 (currently amended):   A method for maintaining

2   information used to control sampling of addressed data, the

3   method comprising:

4   a)   accepting configured next hop information;

5   b)   determining next hop interface information from

6   the accepted configured next hop information;

7   c)   determining a state of the next hop interface

8   information; and

9   d)   storing the determined next hop interface

10   information and the state of the next hop interface

11   information,

12   The method of claim 26 wherein the act of storing the

13   determined next hop interface information and the state of

14   the next hop interface information includes writing the

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15   next hop interface information and the state of the next
16   hop interface information into at least one hardware
17   register.
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Claims 32 and 33 (canceled)

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1    Claim 34 (currently amended):  A computer-readable
2    machine-readable medium having computer-readable
3    machine-readable data structures stored thereon, the
4    computer-readable machine-readable data structures
5    comprising:
6         a)   at least one parameter for controlling the
7         sampling of addressed data;
8         b)   information identifying a next hop destination of
9         samples of addressed data;
10        c)   information identifying a state of the information
11        identifying a next hop destination of samples of
12        addressed data; and
13        d)   a forwarding table,
14             wherein the forwarding table includes a plurality
15   of entries, each of the plurality of entries including a
16   next hop index and a next hop interface.
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1    Claim 35 (currently amended):  The computer-readable
2    machine-readable medium of claim 34 wherein each of the
3    plurality of entries of the forwarding table further
4    includes a next hop address.
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Claims 36-48 (canceled)

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